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Subject:

Allied Paper, Inc./Portage Creek/Kalamazoo River Superfund Site
Multi-Area Health and Safety Plan Addendum 5 – Revision 1: Plainwell No. 2 Dam
Area TCRA

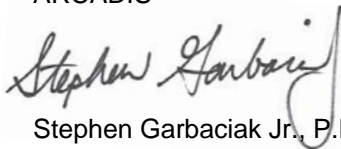
Dear Mr. Borries, Ms. Kirby-Miles, and Mr. Karl:

On behalf of the Kalamazoo River Study Group (KRSG), please find enclosed Revision 1 to Addendum 5 (Addendum) of the Multi-Area Health and Safety Plan (HSP) (Rev. 1). The original version of the Addendum was submitted to the United States Environmental Protection Agency (USEPA) on July 31, 2009. It has been revised to incorporate updated staging area locations and to update the contact details for the USEPA On-Scene Coordinator.

The Multi-Area HSP and its associated addenda provide a mechanism for establishing safe working practices while conducting the TCRA activities at the Plainwell No. 2 Dam Area. Hard copies of this Addendum are provided, along with a CD containing a PDF version of the entire document.

Sincerely,

ARCADIS



Stephen Garbaciak Jr., P.E.
Vice President

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Our ref:
B0064536.00675



Mr. Borries, Ms. Kirby-
Miles, and Mr. Karl
March 1, 2010

Copies:

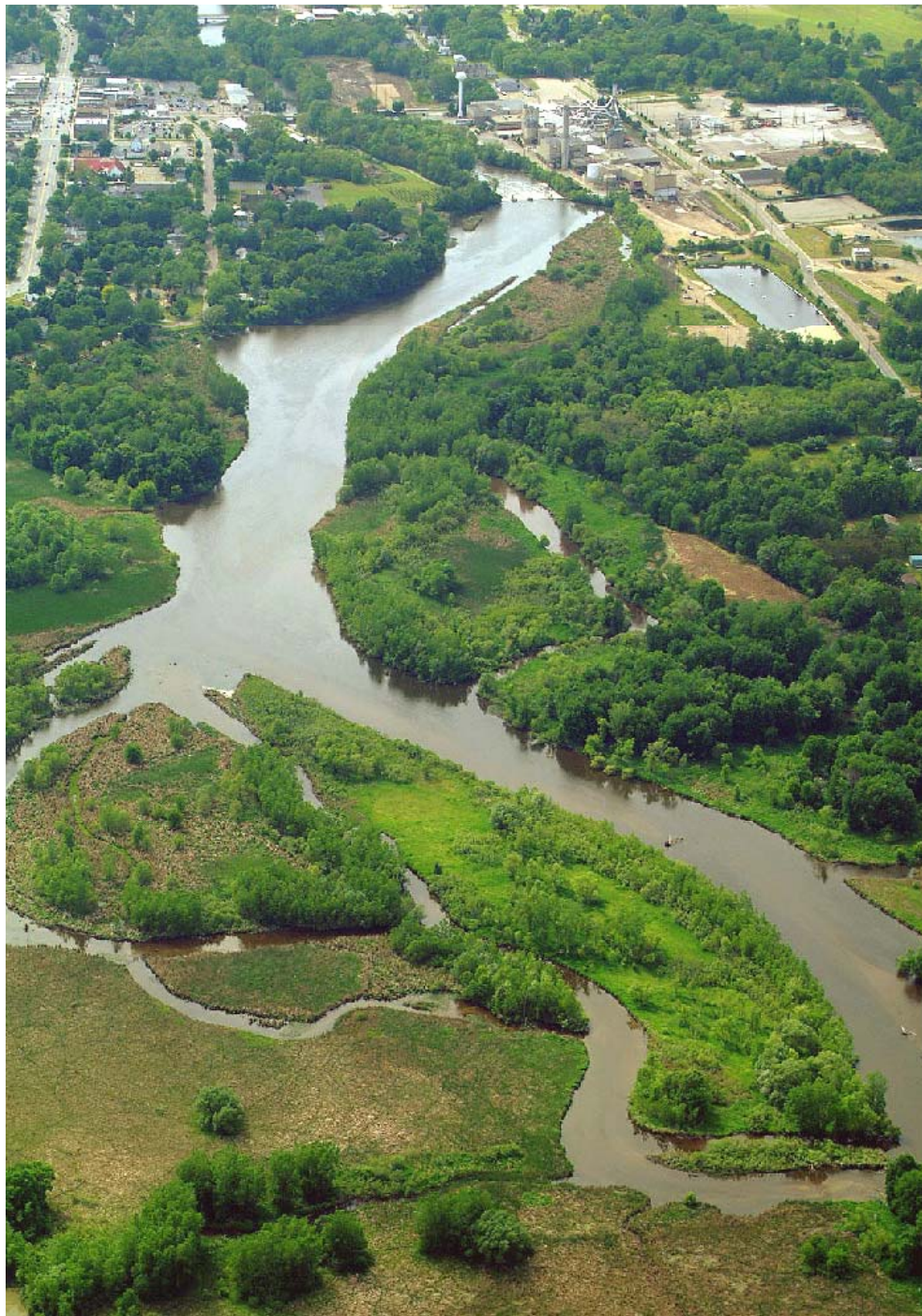
James Saric, USEPA
Garry Griffith, Georgia-Pacific Corporation, LLC.
Michael J. Erickson, P.E., ARCADIS
Matthew Bowman, ARCADIS

Allied Paper, Inc./Portage
Creek/Kalamazoo River
Superfund Site

**Multi-Area Health and
Safety Plan (Rev. 1)
Addendum 5:
Plainwell No. 2 Dam
Area Time-Critical
Removal Action**

Kalamazoo River Study Group

March 2010



**Allied Paper, Inc./Portage Creek/
Kalamazoo River Superfund Site**

**Multi-Area Health and Safety Plan
(Rev. 1) Addendum 5: Plainwell
No. 2 Dam Area Time-Critical
Removal Action (Rev. 1)**

Georgia-Pacific LLC

March 2010



Michael J. Erickson, P.E.
Principal in Charge

Stephen D. Garbaciak Jr., P.E.
Vice President

Charles P. Webster, CSP
Health and Safety Manager

**Multi-Area Health and Safety
Plan (Rev 1) Addendum 5:
Plainwell No. 2 Dam Area Time-
Critical Removal Action**

Allied Paper, Inc./Portage Creek/
Kalamazoo River Superfund Site

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Our Ref.:
B0064536.00670

Date:
March 1, 2010

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1. Introduction

1.1 General

On February 21, 2007 the Kalamazoo River Study Group, or KRSG, voluntarily entered into an Administrative Settlement Agreement and Order on Consent (AOC) with the U.S. Environmental Protection Agency (USEPA). This agreement, which described a series of supplemental remedial investigations and feasibility studies (SRIs/FSs) to be carried out at the Allied Paper, Inc./Portage Creek/Kalamazoo River Superfund Site (Site or Superfund Site), is referred to as the SRI/FS AOC (Comprehensive Environmental Response, Compensation, and Liability Act [CERCLA] Docket No. V-W-07-C-864). The SRI/FS work conducted to date has been focused in Area 1 of the Site – defined as the reach of the Kalamazoo River between Morrow Dam and the Plainwell Dam and a stretch of Portage Creek – as described in the USEPA-approved *Supplemental Remedial Investigation/Feasibility Study Work Plan – Morrow Dam to Plainwell Dam* (Area 1 SRI/FS Work Plan; ARCADIS BBL 2007a).

After reviewing the results of sampling and investigation work in the Plainwell No. 2 Dam Area completed pursuant to the Area 1 SRI/FS Work Plan (ARCADIS BBL 2007a), USEPA determined that a Time-Critical Removal Action (TCRA) was necessary in the Plainwell No. 2 Dam Area to address potential sources of polychlorinated biphenyls (PCBs) to the river. Locations targeted for excavation in the Plainwell No. 2 Dam Area include bank soils, sediments in a portion of a historical oxbow channel, and soils in a floodplain area adjacent to the oxbow.

In June 2009, USEPA and Georgia-Pacific LLC (Georgia-Pacific) signed an AOC that formalized the agreement to complete a TCRA (Plainwell No. 2 TCRA AOC; CERCLA Docket No. V-W-09-C-925). The Plainwell No. 2 Dam Area TCRA AOC requires development and submission of a Health and Safety Plan (HSP) designed to protect on-site personnel and area residents from physical, chemical, and hazards posed by the TCRA. USEPA agreed that Georgia-Pacific could submit an addendum to the *Allied Paper, Inc./Portage Creek/Kalamazoo River Superfund Site Multi-Area Health and Safety Plan* (Rev. 1) (Multi-Area HSP, ARCADIS BBL 2007b) to satisfy this requirement. This revision to Addendum 5 to the *Multi-Area HSP* (Addendum) – which describes the health and safety risk analysis for the proposed activities, a description of required environmental monitoring and personal protective equipment (PPE), required medical monitoring, work area controls (i.e., decontamination and contaminant control), and contingency and emergency planning – has been developed to meet the requirements of the activities to be performed under the Plainwell No. 2 Dam TCRA AOC.

This revision to the July 2009 version of the Addendum was developed to document changes to the staging areas that will be used during the 2010 construction season (see Figure 1-1) and update the name and contact information for USEPA's On-Scene Coordinator (see Table 2-1).

1.2 Objective

The objective of this Addendum is to provide a mechanism for establishing safe working practices while conducting the TCRA activities. The safety organization, procedures, and PPE have been established based on an analysis of potential physical, chemical, and biological hazards. Specific hazard control methodologies have been evaluated and selected to minimize the potential of injury, illness, or other hazardous incidents. Table 1-1 (located at the end of this addendum) presents an activity hazard summary table for the Plainwell No. 2 Dam Area.

1.2.1 Time-Critical Removal Action Activities

As identified above, USEPA determined that a TCRA was necessary in the Plainwell No. 2 Dam Area to accomplish the specific removal action objectives for the project. These removal actions are identified in the *Plainwell No. 2 Dam Area Time-Critical Removal Action Draft Design Report* (TCRA Design Report, ARCADIS 2009), which was approved by USEPA in July 2009. Work activities commenced in August 2009. An area site plan is illustrated in Figure 1-1.

The following field activities have been/will be conducted:

- Pre-design investigation and site reconnaissance
- Surveying activities
- Mobilization (including site preparation activities, clearing and grubbing, and access road construction)
- Sediment and soil excavation operations
- Material transport and disposal at an offsite location
- Personnel and equipment decontamination
- Environmental monitoring
- Construction oversight

- Site restoration and demobilization

1.3 Applicability of the Multi-Area HSP

The Plainwell No. 2 Dam Area TCRA is being performed using similar construction techniques as the Former Plainwell Impoundment TCRA, completed between 2007 and 2009. The Former Plainwell Impoundment TCRA was conducted under the Multi-Area HSP (ARCADIS BBL 2007b) and associated Addenda 1 through 4. Over 200,000 man hours of work were performed at the Former Plainwell Impoundment with one recordable incident. The Plainwell No. 2 Dam Area TCRA is being performed following the health and safety guidelines established in the Multi-Area HSP and associated addenda. To date, approximately 14,700 man hours of work have been performed at the Plainwell No. 2 Dam Area TCRA with no recordable incidents.

1.4 Policy Statement

The policy of ARCADIS is to provide a safe and healthy work environment. No aspect of operations is of greater importance than the prevention of injury and illness. A fundamental principle of safety management is that all injuries, illnesses, and incidents are preventable. ARCADIS takes every reasonable step to eliminate or control hazards to minimize the possibility of injury, illness, or incident.

This Addendum prescribes the procedures that must be followed during activities conducted as part of the TCRA at the Plainwell No. 2 Dam Area. Operational changes that could affect the health and safety of personnel, the community, or the environment are not made without the prior approval of the Project Coordinator (PC) and the Health and Safety Manager (HSM). Any changes in site conditions and/or the scope of work covered under the Plainwell No. 2 Dam TCRA AOC require the review and modification (if necessary) of this Addendum – such changes will be completed in the form of a revision to this Addendum.

The provisions of this plan are mandatory for all ARCADIS personnel assigned to the Plainwell No. 2 Dam Area TCRA. All visitors to ARCADIS work areas at the Plainwell No. 2 Dam Area TCRA must read and abide by the requirements of this plan. Subcontractors prepare their own site-specific/project-specific HSP that must meet the basic requirements of the Multi-Area HSP and associated addenda.

2. Roles and Responsibilities

2.1 All ARCADIS Personnel

All ARCADIS personnel must adhere to the procedures outlined in the Multi-Area HSP (ARCADIS BBL 2007b) and relevant addenda during the performance of their work. Each person is responsible for completing tasks safely and reporting any unsafe acts or conditions to their supervisor. No person may work in a manner conflicting with these procedures. The PC has the authority to dismiss any person from the Plainwell No. 2 Dam Area who violates the procedures identified in this Addendum and the Multi-Area HSP.

All ARCADIS personnel receive training in accordance with applicable regulations, and are familiar with the requirements and procedures contained in the Multi-Area HSP and relevant addenda prior to initiating Plainwell No. 2 Dam Area activities. In addition, all onsite personnel attend an initial hazard briefing prior to beginning work at the Plainwell No. 2 Dam Area.

The roles of ARCADIS personnel are outlined in the following subsections. A summary table for key project personnel and contacts is provided below.

Table 2-1 – Key Personnel

Role	Name	Address/Telephone No.
ARCADIS Personnel		
Principal in Charge (PIC)	Michael J. Erickson, P.E.	10559 Citation Drive Suite 100 Brighton, MI 48116 Phone: 810.225.1924 Cell: 734.604.7044
Plainwell No. 2 Dam Area Project Coordinator (PC)	Stephen Garbaciak Jr., P.E.	30 W. Monroe St. Suite 1710 Chicago, IL 60604 Phone: 312.332.4937 ext.12 Cell: 708-203-0566
Health and Safety Officer (HSO)	Jay D. Keough, CIH	8 South River Road Cranbury, NJ 08512 Phone: 609.860.0590 ext. 101 Cell: 908.492.5674

Role	Name	Address/Telephone No.
Health and Safety Manager (HSM)	Charles P. Webster, CSP	6723 Towpath Road P.O. Box 66 Syracuse, NY 13214 Phone: 315.671.9297 Cell: 315.247.5971
Health and Safety Supervisor	Ben Lawrence	10559 Citation Drive Suite 100 Brighton, MI 48116 Phone: 810.229.8594 Cell: 734.732.0586
Site Supervisor (SS)	EJ Suardini	10559 Citation Drive Suite 100 Brighton, MI 48116 Phone: 810.225.1955 Cell: 734.276.2566
Georgia-Pacific Personnel		
Technical Lead	Garry Griffith, P.E..	951 County Street Milan, MI 48160-9610 Phone: 734.439.1205 Cell: 734.735.0780
USEPA Region 5 Personnel		
On-Scene Coordinator (OSC)	Sam Borries	77 W. Jackson Blvd (SR-6J) Chicago, IL 60604 Phone: 312.353.8360 Cell: 312.802.5336

2.2 ARCADIS Personnel

2.2.1 Principal in Charge and Project Coordinator

The Principal in Charge (PIC) is responsible for promoting health and safety in all aspects of the project and empowering the PC to implement the requirements of this Addendum.

The PC is responsible for verifying that activities are completed in accordance with the requirements of this Addendum. It is also the responsibility of the PC to perform the following duties:

- Consult with the HSM on Plainwell No. 2 Dam Area health and safety issues.
- Review Loss Prevention Observation reports (Appendix A of the Multi-Area HSP).
- Verify that all incidents and near-misses are thoroughly investigated and reported to Georgia-Pacific within 24 hours of notification.
- Approve, in writing, addenda or modifications to this Addendum.
- Suspend work or modify work practices, as necessary, for personal safety, protection of property, and regulatory compliance.

In addition, the PC is responsible for confirming that the Site Supervisor (SS) has the equipment, materials, and qualified personnel to fully implement the safety requirements of this Addendum.

2.2.2 Other ARCADIS Personnel

All other personnel roles are outlined in Sections 2.2.2 to 2.2.5 of the Multi-Area HSP (ARCADIS BBL 2007b).

2.3 Other Roles and Responsibilities

Further information on Contractor Qualified Safety Personnel, Stop Work Authority, Short-Service Employee Program, Visitors, and the ARCADIS Near-Loss Reporting Hotline can be found in Sections 2.3 to 2.8 of the Multi-Area HSP (ARCADIS BBL 2007b).

3. Project Hazards and Control Measures

3.1 Field Activities, Hazards, and Control Procedures

The scope of work for the Plainwell No. 2 Dam Area TCRA includes the activities outlined in Section 1.2.1. The activity hazards at the Plainwell No. 2 Dam Area, provided below and in Table 1-1, identify potential health, safety, and environmental hazards associated with each type of field activity. Because of the complex and changing nature of field projects, the SS must continually inspect the Plainwell No. 2 Dam Area to identify hazards that may affect onsite personnel, the community, or the environment. The SS must be aware of these changing conditions and discuss them with the PC whenever these changes impact employee health, safety, the environment, or performance of the project. The SS keeps onsite personnel informed of the changing conditions, and the PC writes and/or approves addenda or revisions to this Addendum as necessary.

Many of the field activities, hazards, and control procedures are similar to those outlined in the Multi-Area HSP (ARCADIS BBL 2007b). The Multi-Area HSP has therefore been referenced where applicable.

3.1.1 Pre-Design Investigation

3.1.1.1 Site Reconnaissance

Site reconnaissance activities were completed during the pre-construction phases of the project and generally involved walking or driving across the Plainwell No. 2 Dam Area to evaluate existing conditions. Hazards associated with the terrain of the Plainwell No. 2 Dam Area and environmental conditions were identified.

Hazards – Walking surfaces may involve slip, trip, or fall hazards. Slippery walking surfaces can increase the possibility of slips and falls. The immediate proximity of the Plainwell No. 2 Dam Area to the Kalamazoo River increases the possibility of slipping and falling into the river itself and drowning. Several areas around the Plainwell No. 2 Dam Area are also low-lying and prone to flooding, which increases the risk of drowning or injury due to a rapidly rising river level and slippery walking surfaces. Also, debris carried by the river during flooding conditions could strike people or equipment.

Environmental hazards may include plants such as poison ivy and poison oak; aggressive fauna such as ticks, fleas, mosquitoes, wasps, spiders, and snakes; weather conditions such as lightning, rain, tornados, snow, sleet, frost, and ice; weather-related effects such as

sunburn, windburn, frostbite, and other heat or cold-related illnesses; and pathogens such as rabies, Lyme disease, and blood-borne pathogens.

Control – Prior to the start of any field activity, the Plainwell No. 2 Dam Area conditions are discussed with all affected employees. Potential hazards are identified, and protective measures are explained and implemented. Personnel should not visit the Plainwell No. 2 Dam Area during periods of heavy rainfall, when the river is more prone to flooding. If flooding or other extreme weather events occur, personnel consult with the SS before visiting the area to verify that conditions are safe.

3.1.2 Mobilization

Refer to Section 3.2.1 of the Multi-Area HSP for a discussion of the potential hazards associated with mobilization including heavy equipment operations, increased traffic, working near the river, and other physical and environmental hazards. As detailed in Section 3.2.1 of the Multi-Area HSP, mobilization activities are assumed to include site preparation activities, clearing and grubbing, and access road construction.

3.1.3 Surveying Activities

Refer to Section 3.2.2 of the Multi-Area HSP for a discussion of the potential hazards associated with surveying including working near the river, and other physical and environmental hazards.

3.1.4 Sediment and Soil Excavation Operations

3.1.4.1 *Excavation activities*

Refer to Section 3.3.3 of the Multi-Area HSP for a discussion of the potential hazards associated with sediment and soil removal operations including heavy equipment operations, materials handling, working near the river, exposure to Plainwell No. 2 Dam Area contaminants, and other physical and environmental hazards.

3.1.4.2 *Backfilling Activities*

Refer to Section 3.3.3.6 of the Multi-Area HSP for a discussion of the potential hazards associated with backfilling activities including heavy equipment operations, materials handling, working near the river, and other physical and environmental hazards.

3.1.5 Material Dewatering and Transport to an Offsite Facility

Following excavation activities, the excavated material is moved away from the river, staged and dewatered, if necessary, and then transported to an off-site licensed disposal facility. Sections 3.3.3.7 and 3.3.4 of the Multi-Area HSP discusses the potential hazards and controls pertaining to this work including working surfaces, heavy equipment operations, materials handling, exposure to Plainwell No. 2 Dam Area contaminants, material dewatering, and increased traffic.

3.1.6 Personnel and Equipment Decontamination

Refer to Section 3.2.3 of the Multi-Area HSP for a discussion of decontamination of non-disposable equipment and the primary potential hazard – release of hazardous materials.

3.1.7 Site Restoration and Demobilization

Refer to Section 3.2.4 of the Multi-Area HSP for a discussion of the potential hazards associated with restoration and demobilization including heavy equipment operation, materials handling, working near the river, and other environmental and physical hazards.

3.1.8 Environmental Monitoring

Refer to Sections 3.3.5.1, 3.3.5.2, and 3.3.5.4 of the Multi-Area HSP for a discussion of the potential hazards associated with air sampling, soil and sediment confirmation sampling, and surface water monitoring including hazards associated with the sample collection methods, sampling equipment, and the environment in which the samples are collected (e.g., sampling near the river).

3.1.9 Construction Oversight

Refer to Section 3.2.5 of the Multi-Area HSP for a discussion of the potential physical and health hazards associated with construction oversight including working around heavy equipment, material handling, and environmental hazards.

3.2 Chemical Hazards

Refer to Section 3.4 of the Multi-Area HSP for a discussion of the potential chemical hazards related to inhalation, ingestion, and skin or eye contact with materials that are impacted by PCBs.

4. Sections of Multi-Area HSP Applicable to the Plainwell No. 2 Dam Area TCRA

Compliance with the following sections of the Multi-Area HSP is required for the Plainwell No. 2 Dam Area TCRA:

- General Safety Practices – Outlined in Section 4 of the Multi-Area HSP
- Personal Protective Equipment – Outlined in Section 5 of the Multi-Area HSP
- Air Monitoring – Outlined in Section 6 of the Multi-Area HSP
- Work Zones and Decontamination – Outlined in Section 7 of the Multi-Area HSP
- Training and Medical Surveillance – Outlined in Section 8 of the Multi-Area HSP
- Emergency Procedures – Outlined in Section 9 of the Multi-Area HSP. Figure 4-1 of this Addendum identifies routes to the hospital from the Plainwell No. 2 Dam Area project site.
- Addendum 2 to the Multi-Area HSP: Changes to the Acceptable Types of PFD (ARCADIS 2008a)
- Addendum 3 to the Multi-Area HSP: Immersion Suits (ARCADIS 2008b)
- Addendum 4 to the Multi-Area HSP: Diving Operations at the Plainwell Dam Project (ARCADIS 2008c)

5. ARCADIS Policies/Procedures

ARCADIS Health and Safety Procedures applicable to this project are listed below. These procedures should be reviewed by the project manager, task manager, and site personnel. The Client Health and Safety Resource should be contacted with any questions concerning the procedures. In the event that there is conflicting information between the policies and information provided in this addendum or the Multi-Area HSP, the rules that provide the most protection to the worker will be followed.

- ARC HSCS005 – Excavation and Trenching
- ARC HSFS019 – Utility Location
- ARC HSGE007 – Hazard Communication
- ARC HSGE024 – Motor Vehicle
- ARC HSIS008 – Hearing Conservation
- ARC HSGE004 – First Aid / Cardiopulmonary Resuscitation (CPR)
- ARC HSMS010 – Incident Reporting and Investigation
- ARC HSGE015 – Personal Protective Equipment (PPE)

6. ARCADIS Field Health and Safety Handbook

The Field Health and Safety Handbook is an ARCADIS document containing information about topic-specific health and safety requirements for the field. This handbook contains relevant general topics and is used as part of the overall health and safety program. Where applicable, the information provided in the handbook is used as an informational source in conjunction with this Addendum and the Multi-Area HSP. Field Health and Safety Handbook sections applicable to this project include:

II. Health and Safety Administration

- A. ARCADIS Responsibilities
- B. Employee Responsibilities
- C. Visitors
- D. Communications
- E. HARC Process (ARCHSMS002)
- F. Incident Investigation (ARCHSMS010)
- G. Near-miss Reporting
- H. Stop Work Authority
- I. Short-service Employee Program
- J. Workplace Violence and Harassment
- K. Drug and Alcohol Awareness
- L. Emergency Action Plan
- M. WorkCare
- N. Subcontractors
- O. Regulatory Inspections (ARCHSG013)
- P. Recordkeeping and Postings

III. General Field Health and Safety Requirements

- A. Daily Safety Meetings/Tailgates
- B. Department of Transportation – HAZMAT Transportation/Dangerous Goods (ARCHSGED02)
- C. First-aid/CPR
- D. Blood-borne Pathogens (ARCHSIH005)
- E. General Health and Safety Rules and Safe Work Permits
- F. General Housekeeping, Personal Hygiene and Field Sanitation
- G. Site Security, Work Zone and Decontamination for HAZWOPER Sites
- H. Personal Safety and Other Unique Site Conditions
- I. Severe Weather
- J. Fire Prevention
- K. Hazard Communication
- L. Noise
- M. Heat and Cold Stress
- N. Biological Hazards
- P. Medical Surveillance (ARCHSGE010)
- R. Personal Protective Equipment (ARCHSGE015)

- S. Travel Safety-Domestic and International (ARCHSGE022)
- T. Vehicle Safety Inspection
- U. Driving
- V. Trailer Safety
- CC. Hand and Power Tools
- DD. Vegetation Management
- EE. Ergonomics
- FF. Site Storage of Hazardous Chemicals, Gases and Solvents
- GG. HAZWOPER and HAZMAT Response (ARCHSSF012)
- II. Drum and Other Material Handling
- JJ. Ladders (Portable/Fixed)
- KK. Signs, Signals and Barricades
- LL. Traffic Control (ARCHSFS017)
- MM. Utility Location (ARCHSF019)
- NN. Backing Safety

IV. General Field Construction Health and Safety Best Management Practices

- A. Elevated Work Surfaces
- D. Excavation/Trenching (ARCHSCS005)
- E. Heavy Equipment (ARCHSCS006)
- F. Hoisting and Rigging, Cranes and Derricks
- L. Temporary Working Surfaces
- O. Rollover and Overhead Protection
- Q. Permit to Work

V. Specific Work Areas, Hazards and Activities

- F. Roadway
- G. Water Operations Work
- I. Industrial Hygiene and Monitoring Equipment
- J. Scientific Scuba Diving

7. References

ARCADIS BBL. 2007a. *Supplemental Remedial Investigation/Feasibility Study Work Plan – Morrow Dam to Plainwell Dam*. Prepared for the Kalamazoo River Study Group by ARCADIS BBL U.S., Inc. February 2007.

ARCADIS BBL. 2007b. *Allied Paper, Inc./Portage Creek/Kalamazoo River Superfund Site Multi-Area Health and Safety Plan (Rev. 1)*. Prepared for the Kalamazoo River Study Group by ARCADIS BBL U.S., Inc. May 2007.

ARCADIS. 2008a. *Allied Paper, Inc./Portage Creek/Kalamazoo River Superfund Site Multi-Area Health and Safety Plan (Rev. 1) – Addendum 2, Change to the Acceptable Types of PFDs*. February 2008.

ARCADIS. 2008b. *Allied Paper, Inc./Portage Creek/Kalamazoo River Superfund Site Multi-Area Health and Safety Plan (Rev. 1) – Addendum 3, Change to Thermal Protective Clothing Requirement*. April 2008.

ARCADIS. 2008c. *Allied Paper, Inc./Portage Creek/Kalamazoo River Superfund Site Multi-Area Health and Safety Plan (Rev. 1) – Addendum 4, Diving Operations at the Plainwell Dam Project*. May 2008.

ARCADIS. 2009. *Allied Paper, Inc./Portage Creek/Kalamazoo River Superfund Site Plainwell No. 2 Dam Area Time-Critical Removal Action Design Report*. Prepared for the Kalamazoo River Study Group by ARCADIS. July 2009.

**Kalamazoo River Study Group
Allied Paper, Inc./Portage Creek/Kalamazoo River Superfund Site
Multi-Area Health and Safety Plan (Rev. 1) - Addendum 5 (Rev. 1):
Plainwell No. 2 Dam Area Time-Critical Removal Action**

Table 1-1 – Activity Hazard Summary Table

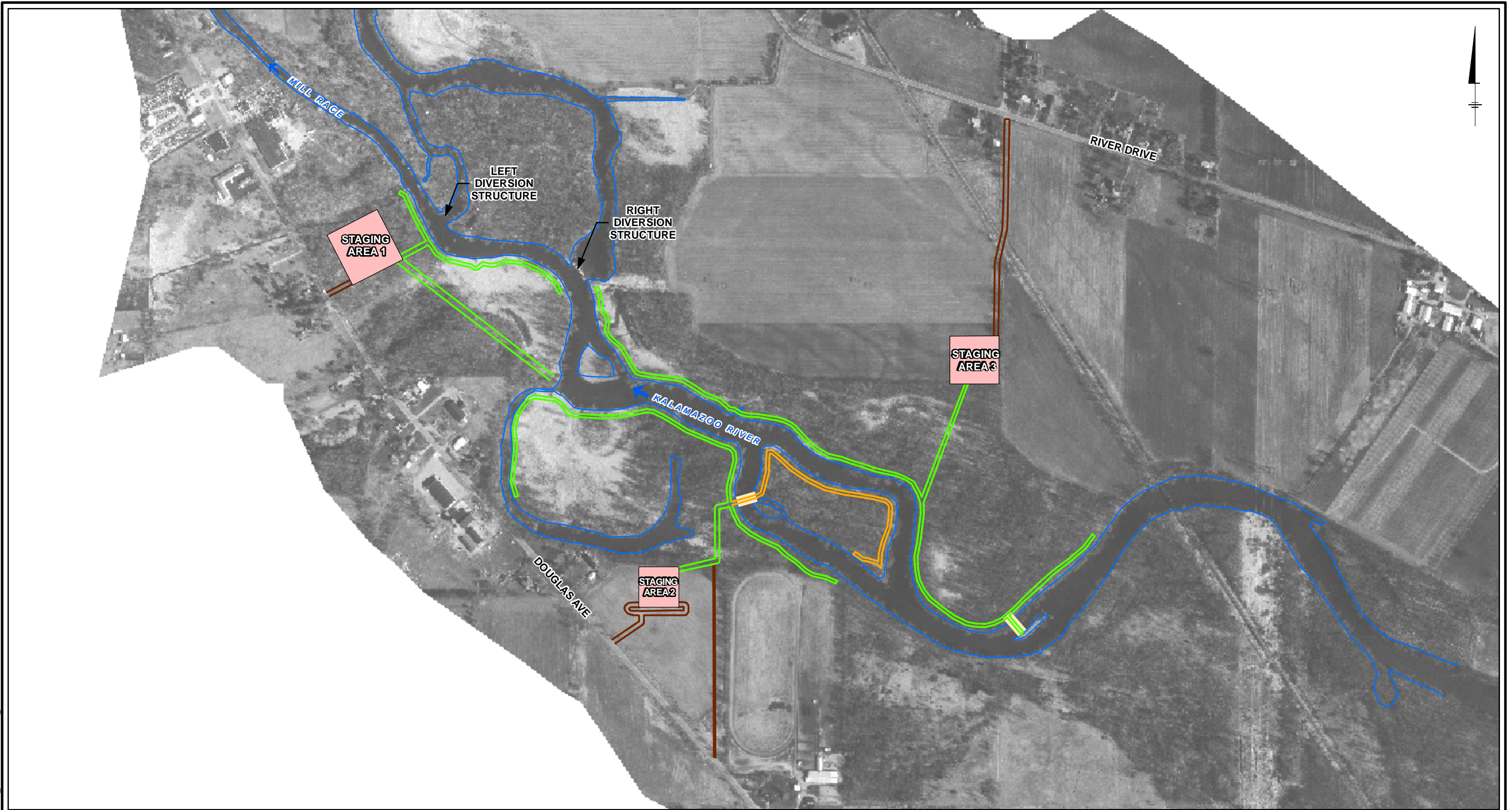
Section Reference	Activity	Hazards	Controls
3.1.1.1	Site Reconnaissance	Slip, trip, and fall/unstable soil	Personnel wear proper foot protection and avoid dangerous terrain.
		Environmental hazards	Personnel wear proper clothing and avoid reaching into dark spaces.
		Water related incidents, drowning, submersion	Personnel wear a MiOSHA-approved PFD whenever working on or near the water. Personnel avoid site visits during periods of heavy rain.
3.1.2	Mobilization	Refer to Table 1-1, section reference 3.2.1, of the Multi-Area HSP	
3.1.3	Surveying Activities	Refer to Table 1-1, section reference 3.2.2, of the Multi-Area HSP	
3.1.4.1	Sediment and Soil Removal Operations	Refer to Table 1-1, section reference 3.3.3, of the Multi-Area HSP	
3.1.9	Personnel and Equipment Decontamination	Refer to Table 1-1, section reference 3.2.3, of the Multi-Area HSP	
3.1.10	Site Restoration and Demobilization	Refer to Table 1-1, section reference 3.2.4, of the Multi-Area HSP	
3.1.11	Environmental Monitoring	Refer to Table 1-1, section references 3.3.5.1, 3.3.5.2, and 3.3.5.4, of the Multi-Area HSP	
3.1.12	Construction Oversight	Refer to Table 1-1, section reference 3.2.5, of the Multi-Area HSP	

Notes:

1. PFD – personal flotation device
2. MiOSHA – Michigan Office of Health and Safety Administration

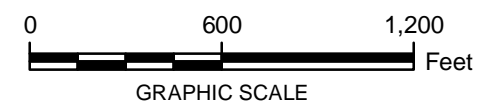
Figures

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LEGEND:

- GRAVEL TRAIN HAUL ROAD
- HEAVY EQUIPMENT HAUL ROAD
- LIGHT DUTY EQUIPMENT HAUL ROAD
- MEDIAN WATER LINE (APPROXIMATE)
- POTENTIAL TEMPORARY BRIDGE
- POTENTIAL STAGING AREA



NOTE:

- REVISED IN FEBRUARY 2010 TO INCLUDE UPDATES TO STAGING AREA LOCATIONS.

KALAMAZOO RIVER STUDY GROUP
ALLIED PAPER, INC./PORTAGE CREEK/
KALAMAZOO RIVER SUPERFUND SITE
MULTI-AREA HEALTH AND SAFETY PLAN ADDENDUM 5

PLAINWELL NO. 2 DAM AREA
SITE PLAN



FIGURE
1-1

